

STATE OF NEW MEXICO  
ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING  
CALLED BY THE OIL CONSERVATION  
DIVISION FOR THE PURPOSE OF  
CONSIDERING:

CASE NO. 9935  
Order No. R-9188

APPLICATION OF HARVEY E. YATES  
COMPANY FOR A HORIZONTAL  
DIRECTIONAL DRILLING PILOT  
PROJECT AND SPECIAL OPERATING  
RULES THEREFOR, LEA COUNTY, NEW  
MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on May 2, 1990, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 30<sup>th</sup> day of May, 1990, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

(1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.

(2) The applicant, Harvey E. Yates Company, seeks authority to initiate a horizontal directional drilling pilot project in the S/2 of Section 26, Township 13 South, Range 35 East, NMPM, Lea County, New Mexico, forming a standard 320-acre gas spacing and proration unit in the Northwest Austin-Mississippian Gas Pool by utilizing its existing Duncan Unit Well No. 3 located at a standard gas well location 660 feet from the South line and 1980 feet from the West line (Unit N) of said Section 26, to drill a lateral wellbore in the following manner:

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Kick off from vertical at a depth of approximately 13,090 feet at a deviation of 1.5 degrees and drill to a depth of approximately 13,548 feet. During this drilling procedure well will be cored in the Mississippian formation and logged to determine the proper direction (either north or northeast) for horizontal extension. Plug back to a depth of 13,090 feet and commence a medium radius curve in the pre-determined direction to encounter the Mississippian formation at approximately 13,434 feet at which point the well will be drilled horizontally within the Mississippian formation a distance of approximately 646 feet.

(3) The applicant further seeks special rules and provisions within the pilot project area including the designation of a prescribed area limiting the horizontal displacement of the proposed wellbore such that it cannot be closer than 1980 feet from the end boundaries nor closer than 660 feet from the side boundaries of the proration unit.

(4) The subject well is located within the Northwest Austin-Mississippian Gas Pool which is currently governed by General Rule No. 104 (C)(II) of the Division Rules and Regulations which require 320-acre gas spacing with wells to be located no closer than 1980 feet from the end boundary nor closer than 660 feet from the side boundary of the proration unit nor closer than 330 feet from any quarter-quarter section or subdivision inner boundary.

(5) Through its evidence and testimony, the applicant demonstrated that the proposed horizontal wellbore, which is experimental in nature, should encounter a substantially greater number of natural fractures within the Mississippian formation than would a conventional wellbore, which may ultimately result in the recovery of a greater amount of gas from the subject proration unit, thereby preventing waste.

(6) The subject well is located within the Duncan Unit Area, which is currently owned and operated by the applicant.

(7) No interest owner appeared at the hearing in opposition to the proposed horizontal directional drilling pilot project.

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(8) Approval of the proposed pilot project should result in the recovery of an additional amount of gas from the subject proration unit which may not otherwise be recovered, thereby preventing waste, and will not violate correlative rights provided that the well is drilled as per the bottomhole location restrictions as described above.

(9) The applicant should be required to conduct a directional survey on the vertical portion of the wellbore prior to commencing directional drilling operations, and on the horizontal portion of the wellbore subsequent to directional drilling operations in order that the direction, extent, and terminus of said wellbore may be determined to be in compliance with the proposed bottomhole location.

(10) The applicant should further be required to submit copies of said directional surveys to the Santa Fe and Hobbs district offices of the Division.

(11) The applicant should notify the supervisor of the Hobbs district office of the Division of the date and time of commencement of directional drilling operations and of the conductance of any directional surveys on the proposed well in order that these operations may be witnessed.

**IT IS THEREFORE ORDERED THAT:**

(1) The application of Harvey E. Yates Company for a horizontal directional drilling pilot project in the S/2 of Section 26, Township 13 South, Range 35 East, NMPM, Northwest Austin-Mississippian Gas Pool, Lea County, New Mexico, is hereby approved.

(2) The applicant is further authorized to utilize its existing Duncan Unit Well No. 3 located at a standard gas well location 660 feet from the South line and 1980 feet from the West line (Unit N) of said Section 26, to drill a lateral wellbore in the following manner:

Kick off from vertical at a depth of approximately 13,090 feet at a deviation of 1.5 degrees and drill to a depth of approximately 13,548 feet. During this drilling procedure well will be cored in the Mississippian formation and logged to determine the proper direction (either north or northeast) for horizontal extension. Plug back to a depth of

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13,090 feet and commence a medium radius curve in the pre-determined direction to encounter the Mississippian formation at approximately 13,434 feet at which point the well will be drilled horizontally within the Mississippian formation a distance of approximately 646 feet.

PROVIDED HOWEVER THAT, the S/2 of said Section 26 shall be dedicated to the subject well forming a standard 320-acre gas spacing and proration unit for said Northwest Austin-Mississippian Gas Pool and;

PROVIDED FURTHER THAT, the horizontal portion of the subject well shall be located no closer than 1980 feet from the end boundaries nor closer than 660 feet from the side boundaries of the subject proration unit.

(3) The applicant shall be required to conduct a directional survey on the vertical portion of the wellbore prior to commencing directional drilling operations, and on the horizontal portion of the wellbore subsequent to the directional drilling operations in order that the direction, extent, and terminus of said wellbore may be determined to be in compliance with the proposed bottomhole location.

(4) The applicant shall further be required to submit copies of said directional surveys to the Santa Fe and Hobbs district offices of the Division.

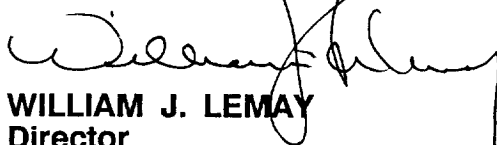
(5) The applicant shall notify the supervisor of the Hobbs district office of the Division of the date and time of commencement of directional drilling operations and of the conductance of any directional surveys on the proposed well in order that these operations may be witnessed.

(6) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

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DONE at Santa Fe, New Mexico, on the day and year  
hereinabove designated.

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION



WILLIAM J. LEMAY  
Director

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